

Choosing your backup power supply

IF YOU NEED :

*Only a tiny amount of electricity for charging a cell phone or running a computer, an **Uninterruptable Power Supply (UPS)** may be all you need, though because it is supplied by an internal battery it may only last for a few hours at a time, depending on its size.

*A minimum amount of power but for a longer time, **an inverter** that plugs into your car that turns the 12 volts DC from your car's battery into 110 volts AC (house power) might be adequate, but remember to charge your car before the car battery is depleted. Larger inverters are available for running power tools or perhaps a furnace or freezer but will require running the car or truck during its use.

*Enough electricity to power critical loads such as a furnace or boiler, microwave, well and/or sump pump and some lights, a modest size portable generator that can be plugged in via extension cords may be adequate except that many of those items are hard wired rather than plugged into an outlet. Only the microwave, sump pump and lamps are generally plugged into wall outlets.

*Enough electricity to power all of the items mentioned above including the ones that are hard wired, you will likely need a generator that can be plugged into a **Power Inlet Box** either inside or, preferable, outside the house. This box connects to a **generator transfer switch** installed near your breaker panel that *disconnects you from utility power* and feeds generator power to your home. If you are fortunate enough to have a neighbor who feeds the cat, dog and chickens when you are away and who can be trusted to get your generator going, be sure to have a **Checklist** clearly explaining all the steps to hooking up the generator, including where the gas is stored and a clear explanation of the necessary safety considerations.

*Enough to power all of the items mentioned above and perhaps some more but you are not always available to start a portable generator, plug it in, and throw the transfer switch, you will need a permanently installed **Standby Generator** that is hooked to an **Automatic Transfer Switch** that disengages your house from your utility's power and, instead, sends generator power to your house circuits. This installation can be for critical loads only or for your whole house needs. Installing a generator only large enough to supply your critical needs even though hooked to the whole house can be a less expensive way to meet critical loads *as long as you do not use high draw appliances like an electric range, clothes dryer and/or air conditioner while hooked to the generator.*

Or consider one of the new **Battery Backup** systems that require no maintenance but work automatically like a permanently installed standby generator. These can be charged using utility power and/or your solar system and will allow the solar system to produce power during a power failure. For more information about choosing your backup power go to:

www.alltimepower.com/learn-more/generator

<https://www.generac.com/for-homeowners/home-backup-power/build-your-generator>